



CITY OF HOUSTON
Houston Public Works

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion



Houston Waterworks Team



Construction Progress – EWP 1/3 & 6 Site Development

Oct 9, 2019

- **Completing EWP1 Punchlist items: Grouting Manholes, installing temp water lines and ARVs**
- **Installing Trailer City 2.0 Utilities and Temporary Construction Water Line**
- **Removing 4in Sanitary Sewer Force Main Pipe and backfilling**
- **Installing HWT Management and Safety Trailers**



Installing temp const. water for North Plant, and building up North berm



Trailer City 2.0 - Laying Temp Construction 6-in Water Line



Trailer City 2.0 – Road Crossing of 6-in Water Line & Speed Bump



Backfilled and filling line to hydro-test 6-in Water Line



Trailer City 2.0 – Clearing area and stringing 8-in HDPE Water Pipe



Removing 4-in PVC Sanitary Sewer Force Main Pipe & Backfilling



Setting HWT Management and Safety Trailer Offices





Construction Progress – Temporary Power

- **Relocate and Re-Power Safety / HWT Trailer**
- **Pre-Fab Central, South and North Distribution Panels**
- **T-282 (Directional Bore), Central Plant Temp Power, Temp Lighting**
- **Temporary Power Horizon Construction Trailer**



Temporary Power East Plant



Safety Trailer Temp Power





Construction Progress – EWP 4 Raw Water Corridor

- **Trench shoring installation and excavation in East Corridor**
- **Trench backfill in West Corridor**
- **Welding and grouting joints**
- **Storm Drainage Installation**
- **Shoring installation at transition to tunnel**
- **Tunnel Grout Contractor mobilization and grout placement**



Station 128+50



Station 134



Station 142+50



Station 100+50



Tunnel 2.0 Portal Excavation sta 134+50





Construction Progress – Central Plant

281-FILTER MODULE 1 :

- **Forming Upper Manifold Deck 8**
- **Reinforcing/Forming Walls**
- **Wall Pours**
- **West Pipe encasement backfilling**

291-TPS:

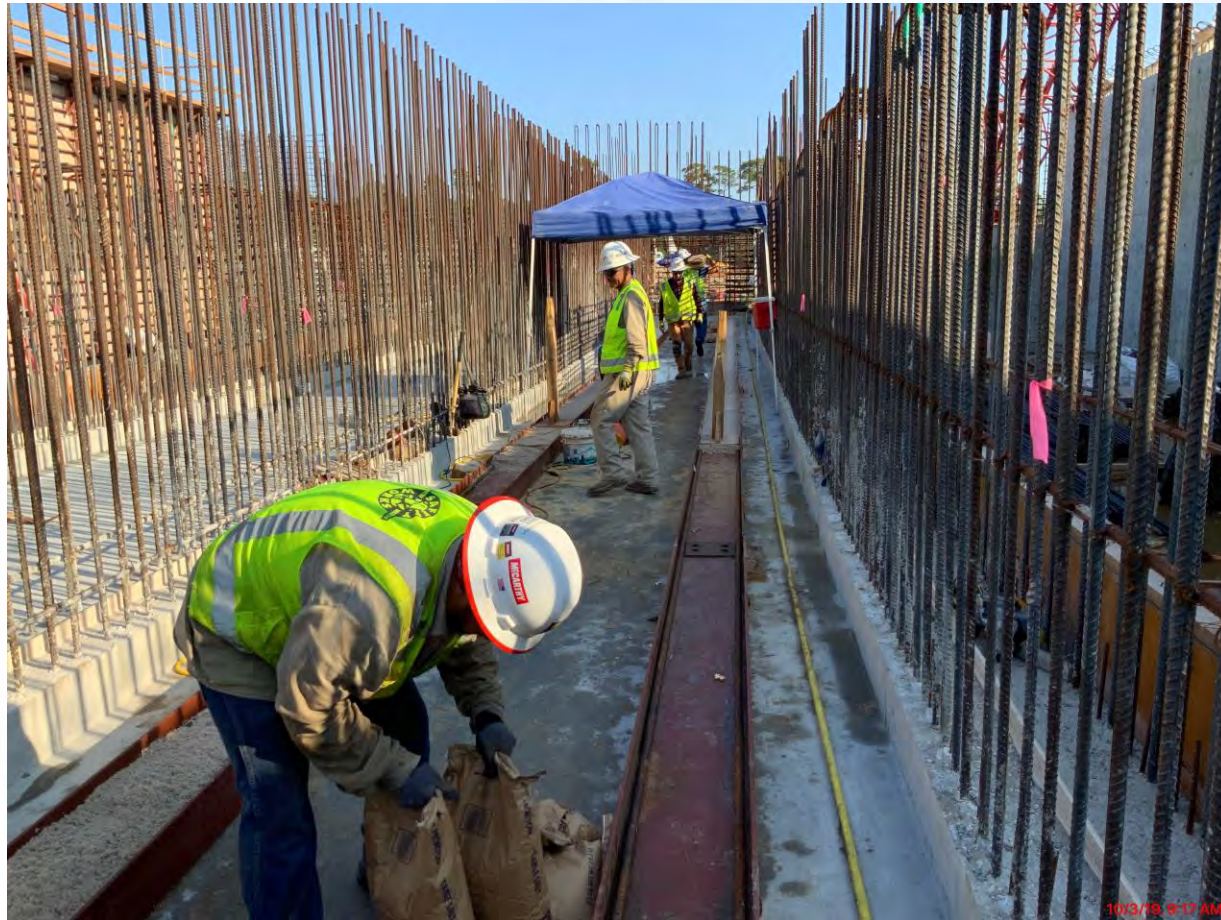
- **Reinstall Waterstops at 60" suction pipe opening**
- **Shoring for Top Deck formwork at East Contact Basin**
- **Continue Cleaning Pump Cans Area**

282 -FILTER MODULE 2:

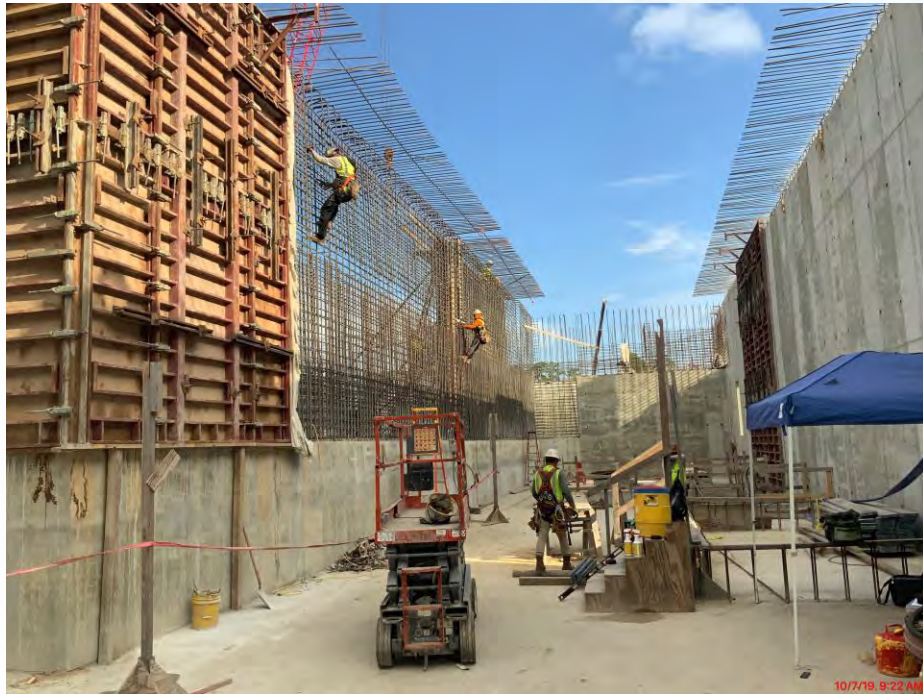
- **Excavation**



281-FILTER MODULE- Forming Upper Manifold Decks 8



281-FILTER MODULE- Reinforcing/Forming Walls



281-FILTER MODULE- Wall Pours (D25,D13)



281-FILTER MODULE- Pipe Encasement/Backfilling



282-FILTER MODULE 2- Earth Work



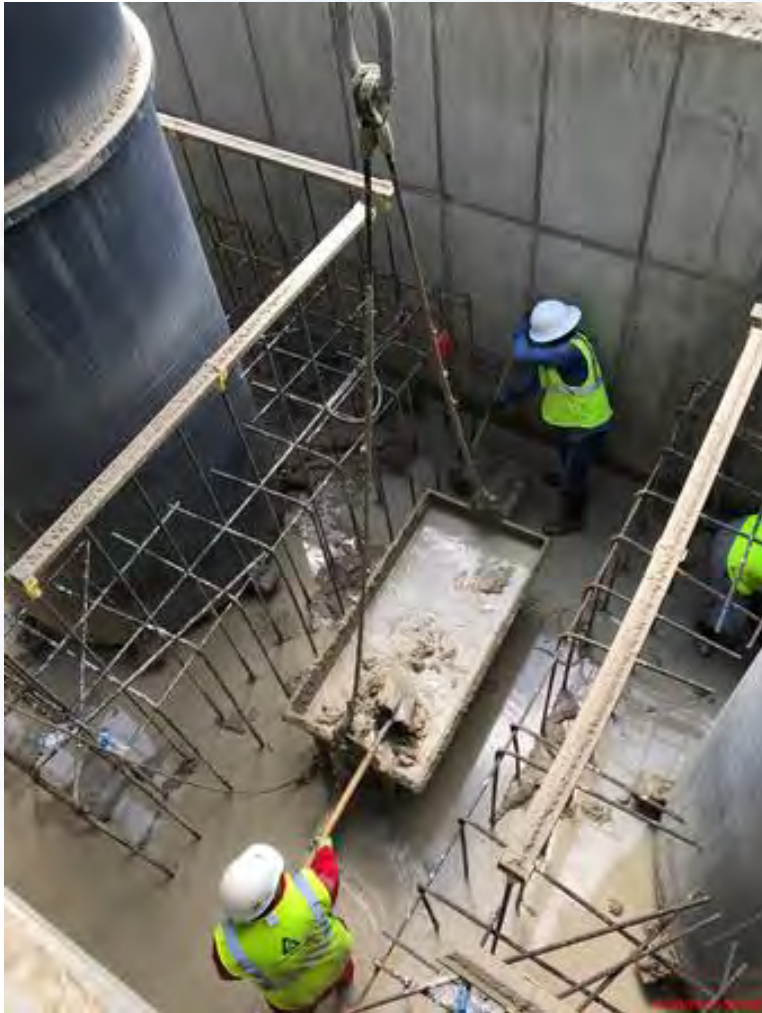
TPS – Reinstall Waterstops at 60" suction pipe openings



TPS – Shoring for Top Deck Formwork



TPS – Continue Cleaning Pump Can Area





Construction Progress – EWP 6 North Plant

- **Facility 214 Subgrade Preparation**
- **Facility 222 Sump and Slab-on-grade F/R/P**
- **Facility 241 Stem Wall F/R/P**
- **Facility 242 Stem Wall F/R/P**
- **Facility 242 Cross Collector Wall F/R/P**
- **Facility 611 Cross Collector slab-on-grade F/R/P**
- **Facility 611 slab-on-grade subgrade preparation**



Facility 214 Subgrade and Mud Mat Prep



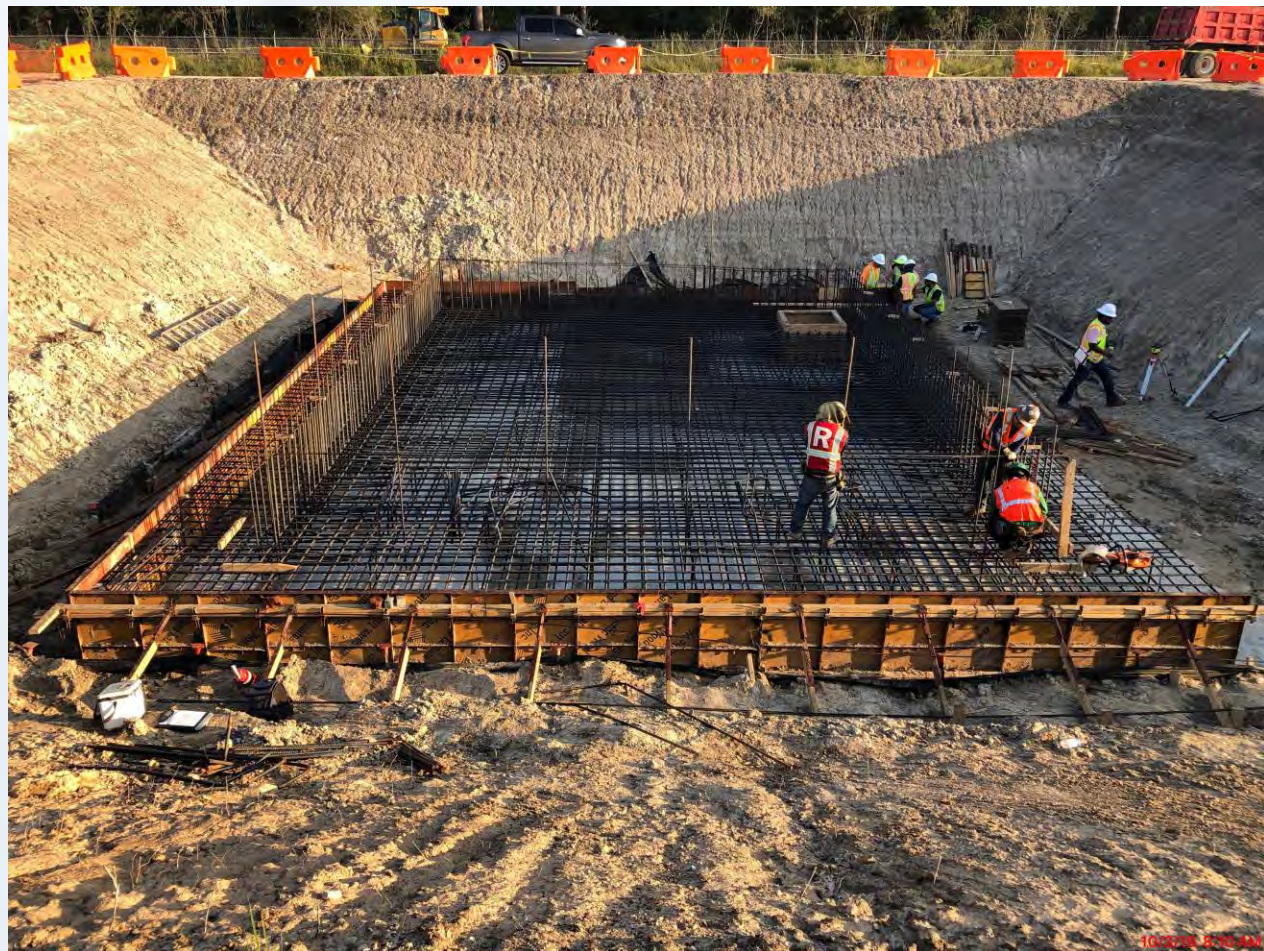
Facility 222 Slab-on-grade Rebar Placement



9/30/19 8:23 AM
Houston Waterworks Team



Facility 222 Slab-on-grade Rebar Placement



Facility 241 Stem Wall F/R/P/S



Facility 241 Stem Wall F/R/P/S



10/2/19 2:37 PM

Facility 242 Cross Collector and Stem Walls F/R/P/S



Facility 242 North SOG Subgrade and Mud Mat Prep



Facility 242 E/W Corridor PDR and RCYS Piping



Facility 611 Cross Collector Slab-on-grade



Facility 611 Slab-on-grade and Mud Mat Prep



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Construction Progress – EWP 6 IPS

- **Completion of Platform Piles**
- **Preparing To Drive 10' Pump Can Casings.**

Friction collars



Materials (IPS)



Barges (IPS)





Construction Progress – EWP 6 Substation Facility 102

- **Forming, reinforcing, and pouring Yard Foundations**



Forming, reinforcing, and pouring Yard Foundations



Continue Yard Foundations





Construction Progress – BOP LREQ Basins Facilities 601/602

- **80ft Shoring installation**
- **Mass excavation at Facility 601/602**

80ft Shoring installation



Mass excavation at Facility 601/602





Construction Progress – Yard Piping

- **Demolishing: Removing, crushing, and disposing of the existing 36-in, 30-in, and 24-in Finished Water (FW) Pipe, appurtenances, and manholes**
- **Receiving and unloading ductile iron pipe deliveries**
- **Installing 24in PW line**



Demolishing Existing 30-in & 24-in FW Pipe & Manholes



Receiving & Unloading Ductile Iron Pipe Deliveries



Excavating and Laying 24-in PW line



Excavating and Laying 30-in RCY line





Construction Progress – Administration Building

- Over Excavation of Building Pad
- Haul off Materials

Over Excavation of Building Pad



Haul off of Materials





Construction Progress – South Plant

- **Alberici Setting up Trailers**
- **Performed in-house proof-roll in GST 1&2**
- **Pulling up 4" Sanitary Pipe that runs under GST 1&2**



Alberici Setting up Trailers



Performed in-house proof-roll in GST 1&2



